

THE CORPORATION OF DELTA  
ENVIRONMENTAL SERVICES DIVISION

September 23, 2003

Energy Facility Site Evaluation Council  
P. O. Box 43172  
Olympia, Washington 98504-3172

Attention: Ms. Irina Makarow, Siting Manager

Dear Madam:

RECEIVED

SEP 26 2003

ENERGY FACILITY SITE  
EVALUATION COUNCIL

We are currently reviewing the Draft Environmental Impact Statement for the BP Cherry Point Cogeneration Project and I would like to bring to your attention some minor errors or incorrect references we have noticed so far during our review. I have contacted Mr. Jack Gouge at Shapiro & Associates Inc. and discussed the following items with him:

Figure 3.2-1 Airsheds of Interest Within 125 Miles of Project Site

- The layer of text and the international boundary line are incorrectly placed on the map layer. As a result, the text and boundary line are located too far north, at least from a Canadian perspective. 1
- Tsawwassen is misspelled on the map. However, Tsawwassen is one of three urban areas within the municipality of Delta and is not a municipality on its own. To be consistent with the naming of other municipalities on the map, the proponents may wish to refer to the area as Delta, rather than Tsawwassen. 2
- The proponents may wish to include the City of Surrey in their labeling of municipalities as it is also adjacent to the U.S. border and is the most populous municipality in the area. 3

Table 3.2-16: Highest Concentrations in Canada

- The location for the 8-HR CO concentration is listed as 7.8 miles north of the project on the US/Canada border while all other parameters in this table are listed as being located 7.5 miles from the border. Is this correct or is it a typo? 4

...../2

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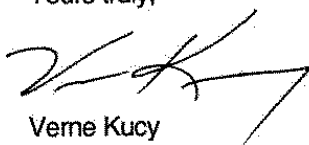
Table 3.2-18: Lines of Sight Evaluated for Visibility Analysis in Canada

- Tsawwassen is misspelled in this table. The proponents may wish to refer to Delta instead of Tsawwassen.

5

For your reference, I have enclosed copies of the map and tables referred to above.

Yours truly,



Verne Kucy  
Manager  
Environmental Services Division

cc: J. Gouge, Shapiro & Associates Inc.

Attachment

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modeled concentration (including background) occurs in the US, and is less than both the US standards and Canadian Objectives. Table 3.2-17 summarizes the concentrations estimated (including background) at the closest monitoring stations in Canada.

**Table 3.2-15: Maximum Concentration Modeling Analysis in Canada**

Pollutant	Averaging Time	Maximum Concentration in Canada ( $\mu\text{g}/\text{m}^3$ )			Most Stringent Canadian Objective or Standard ( $\mu\text{g}/\text{m}^3$ )
		Modeled	Background	Total	
$\text{SO}_2$	annual	0.03	3	3	25
	24-hour	0.7	16	17	150
	three-hour	3.3	27	30	374
	one-hour	5.3	59	64	450
$\text{PM}_{10}$	annual	0.2	13	13	30
	24-hour	2.5	35	38	50
$\text{PM}_{2.5}$ <sup>1,2</sup>	24-hour	0.9	18	19	30
CO	eight-hour	4.8	2,668	2,673	5,500
	one-hour	13.6	2,900	2,914	14,300
$\text{NO}_2$ <sup>3</sup>	annual	0.2	27	27	60
	24-hour	1.6	69	71	200
	one-hour	16.7	107	124	400

Note: Excludes the effect of refinery emissions reductions.

1  $\text{PM}_{2.5}$  emissions are conservatively assumed to be equal to  $\text{PM}_{10}$  emissions.

2 The  $\text{PM}_{2.5}$  Canada-wide standard is based on the 98th percentile averaged over three years; therefore, the modeled and background values indicated above are also based on these assumptions.

3  $\text{NO}_x$  is considered to be fully converted to  $\text{NO}_2$ .

**Table 3.2-16: Highest Concentrations in Canada**

Pollutant	Averaging Time	Concentration ( $\mu\text{g}/\text{m}^3$ )	Location
$\text{SO}_2$	ANNUAL	0.03	7.5-miles north of project on the US/Canada border
$\text{SO}_2$	24-HR	0.7	7.5-miles north of project on the US/Canada border
$\text{SO}_2$	3-HR	3.3	7.5-miles north of project on the US/Canada border
$\text{SO}_2$	1-HR	5.3	7.5-miles north of project on the US/Canada border
$\text{PM}_{10}$	ANNUAL	0.2	7.5-miles north of project on the US/Canada border
$\text{PM}_{10}$	24-HR	2.5	7.5-miles north of project on the US/Canada border
$\text{PM}_{2.5}$	24-HR	0.9	7.5-miles north of project on the US/Canada border
CO	8-HR	4.8	7.8-miles north of project on the US/Canada border
CO	1-HR	13.6	7.5-miles north of project on the US/Canada border
$\text{NO}_x$	ANNUAL	0.2	7.5-miles north of project on the US/Canada border
$\text{NO}_x$	24-HR	1.6	7.5-miles north of project on the US/Canada border
$\text{NO}_x$	1-HR	16.7	7.5-miles north of project on the US/Canada border

Is this correct?

The results of the Canada visibility analyses are summarized in Table 3.2-19. A visual range of less than 37 miles was used to determine impaired visibility. As shown in this table, impacts from the proposed project would not increase the number of days with impaired visibility at any of the seven specified lines of sight. A visibility analysis threshold has not been established by Canadian agencies. For purposes of this analysis, the threshold established by the U.S. federal land managers was used. According to the federal land managers, a greater than 5% change in visibility will evoke a noticeable change in most landscapes. The results of the visibility analysis in Canada show that the maximum visibility change is only 2.7%, which is significantly below the 5% threshold.

**Table 3.2-18: Lines of Sight Evaluated for Visibility Analysis in Canada**

Line of Sight	Observer Location	Direction and Target
1	Victoria	East-northeast to Mount Baker
2	White Rock	East-southeast to Mount Baker
3	Tsawassen	East-southeast to Mount Baker
4	Vancouver	North to North Shore Mountains (The Lions)
5	Langley	North to North Shore Mountains (Golden Ears)
6	Chilliwack	East to Mount Cheam
7	Abbotsford	Southeast to Mount Baker

*TSAWASSEN IS CORRECT OR SIMPLY REFER TO DELTA SPELLING*

**Table 3.2-19: Results of Visibility Analysis in Canada**

Line of Sight	Number of Days with Impaired Visibility, Background Conditions <sup>1</sup>	Additional Days with Impaired Visibility from Cogeneration Facility	Maximum Visibility Change
1	171	0	1.2%
2	166	0	2.4%
3	166	0	2.1%
4	166	0	2.2%
5	166	0	2.7%
6	166	0	1.5%
7	166	0	1.4%

<sup>1</sup> Impaired visibility is defined as those days with a visibility range of less than 37-miles. Excludes the effect of refinery emissions reductions.

#### *Regional Impacts of Concurrent Emissions Reductions at the Refinery*

State regulatory air permitting requirements require that the maximum potential emissions expected from the cogeneration facility be used for permitting purposes. The analyses presented above are based on the maximum potential emissions. However, in order to characterize a scenario of more probable long range impacts to the region, the Applicant has estimated what the actual emissions from the cogeneration facility are likely to be. This estimate is based on the following assumptions, described in more detail below:

- Refinery emissions would decrease because of the removal of existing utility boilers that would no longer be needed once steam was purchased from the cogeneration facility;

